them will be at top and one at bottom, so as to permit loading and discharging at any point in which a car may be stationed, without requiring to be moved specially into position, as would be necessary if but a single opening for the purpose were provided.

The conoidal form of the car-body, sloping from the wheels downward or flaring toward the medial band H, will facilitate the discharge of freight from such body, grain, for example, freely flowing, in the act of discharge, toward the outlet *h*, opened for the purpose, such outlet, of course, being the then lowest one.

To permit access to the interior of the car, a man-hole, *m*, may be formed in one of each pair of wheels.

I have described the wheel as designed for bulk-freight cars the bodies of which are rolling cylinders; but the principle of my improvements in wheels is equally applicable to freight-cars having bodies supported above the wheels, and also to wheels of passenger-cars, as it is manifest that in every such case resiliency will be obtained and the shocks usually felt on such wheels in passing over frogs, &c., taken up. In such cases I would design making the tire of steel rather than of wrought-iron.

I design employing two or more diaphragms, M, in each cylinder or body, so that when the car is started the load will roll with it. Such diaphragms will be attached to the head of the cylinders, and a space will be left between their edges and the walls of said cylinders, so as to have the various compartments which the diaphragms make in communication.

Under some circumstances I may dispense with the wooden fellies and the encircling retaining-band, or use either without the other between the springs and the tire. So, too, plates *d'*, as shown in Fig. 5, may be sometimes used instead of cups in the fellies.

What I claim as my invention is—

1. A pair of car-wheels having each a solid center and an encircling rim or tire, with springs or an elastic medium interposed between said center and tire, in combination with a cylindrical or equivalent body uniting the same, said wheels being formed with inside annular flanges, c^2, to which said body is bolted, substantially as shown and described.

2. The wheel C′, having cast-iron center C^2, with grooved periphery *c*, springs D D, fellies E E, band F, and wrought-iron or steel tire C^3, substantially as shown and described.

3. The body G, having greater diameter in its middle than at its ends, in combination with supporting-wheels, which form the heads or ends of said body, substantially as shown and described.

4. The combination, with wheels C′ C′, of conical sections G and uniting-band H, substantially as herein described.

5. A cylindrical or rolling car-body having multiple loading and discharge openings, said openings being at equal distances apart, or substantially so, and being distributed around the entire circumference of the body, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of December, 1879.

LAURENCE MYERS.

Witnesses:
SAML. J. VAN STAVOREN,
CHAS. F. VAN HORN.